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(54) Title: METHOD AND SYSTEM FOR FUSION AND ACTIVATION FOLLOWING NUCLEAR TRANSFER IN RECONSTRUCTED EMBRYOS

(57) Abstract: The present invention provides data to demonstrate that the re-fusion, of a mammalian karyoplast to an enucleated *in vivo* ovulated oocyte, following an unsuccessful initial simultaneous electrical fusion and activation event offers an additional alternative and improvement in the creation of activated and fused nuclear transfer-capable embryos for the production of live offspring in various mammalian non-human species including goats, pigs, rodents, primates, rabbits and cattle. Additionally, multiple electrical pulses offers an alternative and more efficient activation method in a simultaneous fusion and activation methodology for viable offspring production in a animal nuclear transfer program.

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